

Hybrid Phthalocyanine Derivatives And Their UsesABSTRACT OF THE DISCLOSURE

Water soluble hybrid phthalocyanine derivatives useful in competitive and noncompetitive assays immunoassays, nucleic acid and assays are disclosed and claimed having

5 (1) at least one donor subunit with a desired excitation peak; and (2) at least one acceptor subunit with a desired emission peak, wherein said derivative(s) is/are capable of intramolecular energy transfer from said donor subunit to said acceptor subunit. Such derivatives also may contain an electron transfer subunit. Axial ligands may be covalently bound to the metals contained in the water soluble hybrid phthalocyanine derivatives. Ligands, ligand analogues, polypeptides,

10 proteins and nucleic acids can be linked to the axial ligands of the dyes to form dye conjugates useful in immunoassays and nucleic acid assays.